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PROSPECTS OF AN ENERGY POLICY FOR THE DEVELOPMENT OF SOUTHERN ITALY

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PROSPECTS OF AN ENERGETIC POLICY FOR THE DEVELOPMENT OF SOUTH ITALY

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Soon after the second world war the economic and social structures of South Italy were not much changed compared with those existing at the beginning of the century. The gap continued between North and South, as it was manifest in Italy since the times of the Union, a fact denounced during decades by famous historians, economists and sociologists, giving rise to vivid polemics and debates on the so called "Southern Problem".

The different political climate of the years immediately following the war brought forth the intervention of the State, whose action concerned mainly the agricultural development and the creation of new infrastructures. However, the prior choice of the latter type of intervention presumed, by itself, an ensueing process of industrialization, considered as the aim of the development policy, so that this first stage can be considered, as regards the type or the sectors in which the public investments have been chiefly affected (roads, water conduits etc.), as the stage of preindustrialization.

The transition to the next stage of real industrialization was effected through direct intervention of the State industry and the creation, still in course, of special poles of development, by means of which one tries to render possible an autonomous process of economic development.

In the sphere of this policy public initiatives with the aim of potentializing the energetic sector assume a particular importance. In this connexion it should be noted that the intervention of societies financially supported by the State in the development of the South took place not only in terms of quantity i.e. as a total colume of investments, but also in terms of quality i.e. as regards qualification of the investments, in view of a larger realization of the economic initiatives.

In the four years period 1958-1961 on the total of industrial investments amounting to 304, 5 billions of lire, 204, 9 billions of lire (about 67%) have been spent on the energetic sector.

The amount of such investments, although demonstrating the efforts made to meet the needs of an increased economic development, did not however reduce, to a great extent, the gap existing, as regards the production of energetic sources, primary and secondary, between North and South.

The Schedule below shows, in fact, that the percentage data referred to the disponibility of primary and secondary sources of energy in North and

Central Italy and in South and Insular Italy have not greatly changed in the years 1958-1961, but on the contrary, as regards the first ~~ones~~, the gap seems even more striking.

RATES OF INCREASE OF PRIMARY AND SECONDARY SOURCES OF ENERGY IN NORTH CENTRAL AND IN SOUTH AND INSULAR ITALY

Period 1958 - 1961

	North and Central Italy	South and Insular Italy	Italy
		Primary Sources	
1958	72, 81	27, 19	100
1961	74, 48	25, 52	100
		Secondary sources	
1958	71, 56	28, 44	100
1961	68, 40	31, 60	100

A little brighter seem, instead, the rates regarding the secondary sources with an increase in the South Regions from 28, 44% to 31, 60% of the national total.

Nevertheless, with reference to analyses effected on the results of the last decades and on the basis of the data exposed in regard of the last four years period, we can affirm that it will be difficult to fill the gap in the energetic field between North and South, unless applying - with particular reference to the South Regions - a larger and more organic utilization of a new source of energy : ~~the~~ nuclear energy.

Finally, owing to substantial deficiency in energetic resources in the South and to the impossibility of meeting future needs by means of traditional resources existing on the spot, the solutions offered by the utilization of nuclear energy are the most corresponding to the need of an ulterior substantial reduction of the gap in regard of the energetic potential between North and South and a more speedy and autonomous development of the entire Southern Region.

Recently, a series of facts have contributed to diffuse the opinion according to which the cost of production of electricity of nuclear origin would not correspond to those low levels prognosticated some years ago. Should this be true, it would

be necessary to reconsider all the ~~hopes~~ attached to nuclear energy as well as the programs that on the basis of ~~such hopes~~ had ~~found~~ their concrete start. And as in this connexion the factor "cost" is of most importance, to establish the truth or the contrary to what was states above is urgent. Without speaking of debates, that since years are taking place on an international level, on economic aspects of the production of electricity from nuclear sources, we shall but state that although the cost of the latter be at present 20% higher than the cost of traditional thermal energy, there are ~~actually~~ modifications being introduced in the nuclear tecnology and new materials are employed on a large scale, so that the time seems near in which the difference between the cost of electricity produced by means of conventional sources and the cost of electricity of nuclear origin will be abolished. On the basis of the most recent analyses on costs of a nuclear power plant, it seems, in fact, that by adopting a particular type of an American boiling water reactor, the plant could produce electricity at 5, 90 lire a KWh. And at normal conditions of working for 7.000 hours a year, an English power plant will be able to furnish, in about two years, electric energy at the cost of 4, 80 lire pro KWh.

And so, on the ground of the preceding considerations it appears prevident and economically rational, to build the future power policy in the South on the use of nuclear power plants.

To-day there are in construction in the South two big nuclear power plants at the total of 350 MWe the production of which is calculated in 2, 5 billions of KWh. They are : the power plant of Latina of the S. I. M. E. A. of 200 MWe and the plant of Garigliano of the S. E. N. N. of 150 MWe. A third nuclear power plant of the type PWR of the S. E. L. N. I. is in construction in Trino Vercellese, in Northern Italy. With this plant added, whose realization depends on the general stabilization of the power producing societies, Italy's producing capacity will reach 500 MWe. To express the production in KWh, these three plants are expected to furnish in 1965 from 3, 5 to 4 billions of KWh per year, covering wbout 4-5% of the total production.

As we are about to conclude this report, we would like to point aout that the actual effort in the electric sector will bear no fruits unless there is immediately a second program provided for fixing its goal at the year 1970. It is with reference to that year that ~~full~~ competitivity of electricity of nuclear origin and a further development of nuclear power plants, reaching the power of at least 1000 MWe more, ~~are~~ expected. From 1970 onwards, with tecnological improvements as prospected, the increase in electric power, especially in the South of Italy, will have to be ensured through the nuclear energy.

We conclude affirming that the part nuclear energy is bound to play in the process of economic development of the South of Italy is fondamental, as the nuclear power plants represent the foundation of all ~~the~~ modern and rational planning ~~in respect~~ of industrial development.

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